AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior versions of the claims and all prior listings of the claims in the present application.

1-48. (Cancelled)

49. (Currently Amended) A tyre for a two-wheeled vehicle, comprising:

a carcass structure;

a belt structure;

a tread band; and

a pair of sidewalls;

wherein the carcass structure comprises at least one carcass ply shaped in a substantially toroidal configuration[[,]] ;

wherein opposite lateral edges of the carcass structure are associated with respective bead wires[[,]] ;

wherein each bead wire is enclosed in a respective bead[[,]] ;

wherein the belt structure is disposed in a circumferentially external position relative to the carcass structure;

wherein the belt structure comprises ~~at least~~ one layer of a plurality of circumferential coils, axially arranged side by side, of at least one cord wound at substantially null angle with respect to the equatorial plane of the tyre;

wherein the tread band is superimposed circumferentially on the belt structure;

wherein the side walls are applied laterally on opposite sides relative to the carcass structure[[,]] ;

wherein said ~~the at least one~~ layer of a plurality of circumferential coils is associated with at least one layer of a crosslinked elastomeric material, such that said at least one layer of a crosslinked elastomeric material is disposed either between said carcass structure and said layer of a plurality of circumferential coils or between said layer of a plurality of circumferential coils and said tread band; and

wherein the elastomeric material comprises:

at least one diene elastomeric polymer; and

at least one layered inorganic material comprising an individual layer thickness from 0.01 nm to 30 nm.

50. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material comprises an individual layer thickness from 0.05 nm to 15 nm.

51. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material is intercalated in the elastomeric material.

52. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material is exfoliated in the elastomeric material.

53. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material exhibits, in the elastomeric material, a d-spacing value in X-ray diffraction analysis at least 10% higher than the d-spacing value of the at least one layered inorganic material before dispersing the at least one layered inorganic material into the at least one diene elastomeric polymer.

54. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material exhibits, in the elastomeric material, a d-spacing value in X-ray diffraction analysis at least 20% higher than the d-spacing value of the at least one layered inorganic material before dispersing the at least one layered inorganic material into the at least one diene elastomeric polymer.

55-59. (Cancelled)

60. (Previously Presented) The tyre of claim 49, wherein the at least one layer of a crosslinked elastomeric material comprises a thickness between 0.075 mm and 5 mm.

61. (Previously Presented) The tyre of claim 49, wherein the at least one layer of a crosslinked elastomeric material comprises a thickness between 0.4 mm and 3 mm.

62. (Previously Presented) The tyre of claim 49, wherein the elastomeric material comprises from 1 phr to 120 phr of the at least one layered inorganic material.

63. (Previously Presented) The tyre of claim 49, wherein the elastomeric material comprises from 5 phr to 80 phr of the at least one layered inorganic material.

64. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material comprises one or more phyllosilicates.

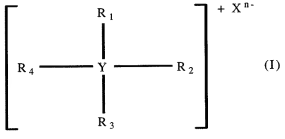
65. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material comprises one or more of smectite, vermiculite, halloysite, and sericite.

66. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material comprises one or more of montmorillonite, nontronite, beidellite, volkonskoite, hectorite, saponite, and sauconite.

67. (Previously Presented) The tyre of claim 49, wherein the at least one layered inorganic material comprises montmorillonite.

68. (Previously Presented) The tyre of claim 64, wherein the at least one layered inorganic material is surface-treated with a compatibilizer.

69. (Previously Presented) The tyre of claim 68, wherein the compatibilizer is selected from quaternary ammonium or phosphonium salts having general formula (I):



(I)

wherein:

Y represents nitrogen or phosphorous;

R_1, R_2, R_3, and R_4, which may be identical or different, represent a linear or branched C_1-C_{20} alkyl or hydroxyalkyl group; a linear or branched C_1-C_{20} alkenyl or hydroxyalkenyl group; a group -R_5-SH or R_5-NH, wherein R_5 represents a linear or branched C_1-C_{20} alkylene group; a C_6-C_{18} aryl group; a C_7-C_{20} arylalkyl or alkylaryl group; a C_5-C_{18} cycloalkyl group, the cycloalkyl group possibly containing at least one heteroatom selected from oxygen, nitrogen, and/or sulfur;

Xn- represents an anion such as the chlorine ion, the sulphate ion or the phosphate ion;

n represents 1, 2, or 3.

70. (Previously Presented) The tyre of claim 49, wherein the at least one diene elastomeric polymer has a glass transition temperature (T_g) below 20° C.

71. (Previously Presented) The tyre of claim 70, wherein the at least one diene elastomeric polymer comprises one or more of: cis-1,4-polyisoprene; 3,4-polyisoprene; polybutadiene; optionally halogenated isoprene/isobutene copolymers; 1,3-butadiene/acrylonitrile copolymers; styrene/1,3-butadiene copolymers; styrene/isoprene/1,3-butadiene copolymers; and styrene/1,3-butadiene/acrylonitrile copolymers.

72. (Previously Presented) The tyre of claim 49, wherein the elastomeric material further comprises at least one elastomeric polymer of one or more monoolefins with an olefinic comonomer or derivatives thereof.

73. (Previously Presented) The tyre of claim 72, wherein the at least one elastomeric polymer of one or more monoolefins comprises one or more of: ethylene/propylene copolymers (EPR) or ethylene/propylene/diene copolymers (EPDM); polyisobutene; butyl rubbers; and halobutyl rubbers.

74. (Previously Presented) The tyre of claim 49, wherein the elastomeric material further comprises at least one silane coupling agent.

75. (Previously Presented) The tyre of claim 74, wherein the at least one silane coupling agent is selected from those having at least one hydrolizable silane group which may be identified by structural formula (II):

$(R)_3Si\text{-}C_nH_{2n}\text{-}X$ (II)

in which the groups R, which may be identical or different, are selected from: alkyl, alkoxy or aryloxy groups or from halogen atoms, on condition that at least one of the groups R is an alkoxy or aryloxy group; n is an integer between 1 and 6 inclusive; X is a group selected from: nitroso, mercapto, amino, epoxide, vinyl, imide, chloro, and -$(S)_mC_nH_{2n}$-Si-$(R)_3$, in which m and n are integers between 1 and 6 inclusive and the groups R are defined as above.

76. (Previously Presented) The tyre of claim 74, wherein the elastomeric material further comprises from 0.01 phr to 10 phr of the at least one silane coupling agent.

77. (Previously Presented) The tyre of claim 74, wherein the elastomeric material further comprises from 0.5 phr to 5 phr of the at least one silane coupling agent.

78. (Previously Presented) The tyre of claim 49, wherein the elastomeric material further comprises at least one additional reinforcing filler in an amount between 0.1 phr and 120 phr.

79. (Previously Presented) The tyre of claim 78, wherein the at least one additional reinforcing filler comprises carbon black.

80. (Previously Presented) The tyre of claim 78, wherein the at least one additional reinforcing filler comprises silica.

81. (Previously Presented) The tyre of claim 80, wherein the elastomeric material further comprises at least one silane coupling agent.

82. (Currently Amended) A process for producing a tyre for a two-wheeled vehicle, comprising:

manufacturing the tyre by assembling at least one carcass ply, a belt structure, and a tread;

wherein the belt structure comprises ~~at least~~ one layer of a plurality of circumferential coils, axially arranged side by side, of at least one cord wound at substantially null angle with respect to the equatorial plane of the tyre;

associating at least one layer of a crosslinkable elastomeric material with said ~~the at least one~~ layer of a plurality of circumferential coils, such that said at least one layer

of a crosslinked elastomeric material is disposed either between said at least one carcass ply and said layer of a plurality of circumferential coils or between said layer of a plurality of circumferential coils and said tread;

subjecting the tyre to moulding in a cavity formed in a vulcanization mould; and

subjecting the tyre to crosslinking by heating;

wherein the belt structure is assembled in a circumferentially outer position with respect to the at least one carcass ply[[,]] ;

wherein the tread is assembled in a circumferentially outer position with respect to the belt structure[[,]] ; and

wherein the elastomeric material comprises:

at least one diene elastomeric polymer; and

at least one layered inorganic material comprising an individual layer thickness from 0.01 nm to 30 nm.

83. (Previously Presented) The process of claim 82, wherein the at least one layered inorganic material comprises an individual layer thickness from 0.05 nm to 15 nm.

84. (Previously Presented) The process of claim 82, wherein the at least one layered inorganic material is intercalated in the elastomeric material.

85. (Previously Presented) The process of claim 82, wherein the at least one layered inorganic material is exfoliated in the elastomeric material.

86. (Previously Presented) The process of claim 82, wherein the at least one layer of a crosslinkable elastomeric material comprises a thickness between 0.075 mm and 5 mm.

87. (Previously Presented) The process of claim 82, wherein the at least one layer of a crosslinkable elastomeric material comprises a thickness between 0.4 mm and 3 mm.

88. (Previously Presented) The process of claim 82, wherein the at least one layered inorganic material exhibits, in the elastomeric material, a d-spacing value in X-ray diffraction analysis at least 10% higher than the d-spacing value of the at least one layered inorganic material before dispersing the at least one layered inorganic material into the at least one diene elastomeric polymer.

89. (Previously Presented) The process of claim 82, wherein the at least one layered inorganic material exhibits, in the elastomeric material, a d-spacing value in X-ray diffraction analysis at least 20% higher than the d-spacing value of the at least one layered inorganic material before dispersing the at least one layered inorganic material into the at least one diene elastomeric polymer.

90. (Previously Presented) The process of claim 82, wherein the at least one layer of a crosslinkable elastomeric material is obtained by winding at least one ribbon band of the crosslinkable elastomeric material in side-by-side coils.

91. (Previously Presented) The process of claim 82, wherein the at least one layered inorganic material comprises one or more phyllosilicates.

92. (Previously Presented) The process of claim 82, wherein the at least one diene elastomeric polymer has a glass transition temperature (T_g) below 20° C.

93. (Previously Presented) The process of claim 82, wherein the elastomeric material further comprises at least one elastomeric polymer of one or more monoolefins with an olefinic comonomer or derivatives thereof.

94. (Previously Presented) The process of claim 82, wherein the elastomeric material further comprises at least one silane coupling agent.

95. (Previously Presented) The process of claim 82, wherein the elastomeric material further comprises at least one additional reinforcing filler in an amount between 0.1 phr and 120 phr.

96. (Previously Presented) The process of claim 95, wherein the at least one additional reinforcing filler comprises carbon black.

97. (Previously Presented) The process of claim 95, wherein the at least one additional reinforcing filler comprises silica.

98. (Previously Presented) The process of claim 97, wherein the elastomeric material further comprises at least one silane coupling agent.